

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Brian S. Sproat

Serial No.: Continuation of 09/908,042 Art Unit: Not Yet Assigned

Filed: July 25, 2003 Examiner: Not Yet Assigned

For: *PURIFICATION OF OLIGOMERS*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including five (5) pages of Form PTO-1449. All of the documents cited below were cited by or submitted to the Patent Office in Application Serial No. 09/908,042, filed July 18, 2001, to which the present application claims priority. Pursuant to 37 C.F.R. §1.98(d), Applicants are not enclosing copies of these publications. Copies will be provided upon request, however.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

U.S.S.N.: Continuation of 09/908,042
Filed: July 25, 2003
INFORMATION DISCLOSURE STATEMENT

U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
5,113,005	05-12-1992	Celebuski	556/449
5,482,836	01-09-1996	Cantor et al.	435/6
6,410225	06-25-2002	Sproat	435/6

Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
WO 97/18312	05-22-1997	VIMRX Holdings, Ltd.	PCT
0 571 087	11-24-1993	Rohm & Haas	EP

Publications

BENSELER, et al., "Hammerhead-like Molecules Containing Non-Nucleoside Linkers Are Active RNA Catalysts" *J. Am. Chem. Soc.* 115:8483-8484 (1993).

CUNNINGHAM, et al., "Preparative-scale purification of RNA using an efficient method which combines gel electrophoresis and column chromatography" *Nucleic Acids Research* 24:3647-3648 (1996).

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JOHNSTONE & THORPE, *Immunochemistry In Practice* (Blackwell Scientific Publications, Oxford, England, 1987) pages 209-216, 241-242, and 30-85.

KERKHOF, et al., "A Comparison of Substrates for Quantifying the Signal from a Nonradiolabeled DNA Probe" *Anal. Biochem.* 205:359-364 (1992).

LANGER, et al., "Enzymatic Synthesis of Biotin-Labeled Polynucleotides: Novel Nucleic Acid Affinity Probes" *Proc. Natl. Acad. Sci. USA* 78:6633 (1981).

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LYNGSTADAAS, et al., "A synthetic, chemically modified ribozyme eliminates amelogenin, the major translation product in developing mouse enamel *in vivo*" *EMBO Journal* 14:5224-5229 (1995).

MULLAH & ANDRUS, "Purification of 5'-O-Trityl-On Oligoribonucleotides. Investigation of Phosphate Migration during Purification and Detritylation" *Nucleosides & Nucleotides* 15:419-430 (1996).

MURRAY, et al., "A General Purification Procedure for Chemically Synthesized Oligoribonucleotides" *Analytical Biochemistry* 218:177-184 (1994).

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OLEJNIK, et al., "Photocleavable biotin phosphoramidite for 5'-end-labelling, affinity purification and phosphorylation of synthetic oligonucleotides" *Nucleic Acids Research* 24:361-366 (1996).

ORTIGO, et al., "Antisense Effect of Oligodeoxynucleotides with Inverted Terminal Internucleotidic Linkages: A Minimal Modification Protecting against Nucleolytic Degradation" *Antisense Res. Dev.* 129-146 (1992).

PANNECOUCKE, et al., "Phosphodiester of 3 β (7 β -hydroxycholestrol) and of 5'(3'deoxy, 3' azido-thymidine)" *Tetrahedron* 50(4):1173-1178 (1994).

PEASE, et al., "Light-generated oligonucleotide arrays for rapid DNA sequence analysis" *Proc. Natl. Acad. Sci. USA* 91(11):5022-5026 (1994).

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POLUSHIN, et al., "On the rapid deprotection of synthetic oligonucleotides and analogs"
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SINHA, et al., "Polymer support oligonucleotide synthesis XVIII^{1,2)}: use of β -cyanoethyl-N,N-dialkylamino-/N-morpholino phosphoramidite of deoxynucleosides for the synthesis of DNA fragments simplifying deprotection and isolation of the final product" *Nucleic Acids Research* 12:4539-4557 (1984).

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STIMPSON, et al., "Real-time detection of DNA hybridization and melting on oligonucleotide arrays by using optical wave guides" *Proc. Natl. Acad. Sci. USA* 92:6379-6383 (1995).

SWIDERSKI, et al., "Polystyrene Reverse-Phase Ion-Pair Chromatography of Chimeric Ribozymes" *Analytical Biochemistry* 216:83-88 (1994).

SYVÄNEN, et al., "Fast quantification of nucleic acid hybrids by affinity-based hybrid collection" *Nucleic Acids Res.* 14:5037 (1986).

TSURUI, et al., "Batchwise Purification of Specific tRNAs by a Solid-Phase DNA Probe" *Analytical Biochemistry* 221:166-172 (1994).

USMAN, et al., "Automated Chemical Synthesis of Long Oligoribonucleotides Using 2'-O-Silylated Ribonucleoside 3'-O-Phosphoramidites on a Controlled-Pore Glass Support: Synthesis of a 43-Nucleotide Sequence Similar to the 3'-Half Molecule of an *Escherichia coli* Formylmethionine tRNA" *J. Am. Chem. Soc.* 109:7845-7854 (1987).

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INFORMATION DISCLOSURE STATEMENT

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



Patrea L. Pabst
Reg. No. 31,284

Dated: July 25, 2003

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	Continuation of 09/908,042
Filing Date	July 25, 2003		
First Named Inventor	Brian S. Sroat		
Group Art Unit			
Examiner Name			
Sheet	1	of	5
		Attorney Docket Number	ILI 125 CON (2)

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

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First Named Inventor	Brian S. Sproat		
Group Art Unit			
Examiner Name			
Sheet	2	of	5
		Attorney Docket Number	ILI 125 CON (2)

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		BENSELER, et al., "Hammerhead-like Molecules Containing Non-Nucleoside Linkers Are Active RNA Catalysts" <i>J. Am. Chem. Soc.</i> 115:8483-8484 (1993).	
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		SPROAT, et al., "An Efficient Method for the Isolation and Purification of Oligoribonucleotides" <i>Nucleosides & Nucleotides</i> 14:255-273 (1995).
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